

CLAIMS

1. A method for the therapeutic treatment of biological tissue of a patient, comprising the following steps:
 - diagnosing the nature and extent of a tissue disorder;
 - establishing the location and size of at least one treatment area;
 - exposing the at least one treatment area to monochromatic, coherent light below the level necessary to cause thermal damage to the tissue being treated, wherein the light is in the near infrared portion of the electromagnetic spectrum; and
 - treating said treatment area for sufficient treatment time to produce clinically beneficial effects by delivering a dosage greater than 20 joules/cm².
2. The method according to claim 1, wherein the monochromatic, coherent light has a wavelength between approximately 700 and approximately 1400 nm.
3. The method according to claim 2, wherein an Nd:YAG laser source is used to produce monochromatic, coherent light of 1064 nm wavelength.
4. The method according to claim 1, wherein the treatment time is less than approximately 20 minutes per treatment area.
5. The method according to claim 4, wherein the treatment time is approximately 90 seconds per treatment area is used.

6. The method according to claim 1, wherein the treatment area is between 0.1 and 100 cm².
7. The method according to claim 6, wherein the treatment area is 10 cm².
8. The method according to claim 1, wherein the dosage is between approximately 20 and 100 J/cm².
9. The method according to claim 8, wherein the dosage is approximately 45 J/cm² dosage.
10. The method according to claim 1, wherein multiple treatment areas are treated.
11. The method according to claim 1, wherein treatment is repeated daily, or periodically for a prescribed number of days necessary to produce clinically beneficial effects.
12. The method according to claim 1, wherein the light is delivered in a continuous wave.
13. The method according to claim 1, wherein the light is produced by a light source operated in a pulsing fashion.
14. The method according to claim 1, wherein the tissue disorder results from acute trauma.

15. The method according to claim 1, wherein the tissue disorder is selected from the group consisting of inflammatory arthritis, soft tissue wounds, osteoarthritis, sports injuries, , tendinitis, neuropathic pain, nerve repair, oro-facial pain, acute and chronic musculoskeletal pain, hemangiomas, tinnitus, immune modulation, patellofemoral pain, bactericidal effects and Pyronie's disease.